UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

DATE MAILED: 10/03/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

32172 7590 10/03/2008 DICKSTEIN SHAPIRO LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) NEW YORK, NY 10/036-2714 EXAMINER

PENDLETON, DIONNE

ART UNIT PAPER NUMBER

2607

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,830	09/26/2006	Takeshi Nakamura	M1071.1960	2884

TITLE OF INVENTION: DIFFUSER AND SPEAKER USING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/05/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or tran g the erwise	smitting the ISSU Patent, advance or in Block 1, by (a							
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
32172	7590 10/03	/2008				Cer	tificate	of Mailing or Trans	mission	
DICKSTEIN SHAPIRO LLP 1177 AVENUE OF THE AMERICAS (6TH AVENU NEW YORK, NY 10036-2714			TH AVENUE)		I her State addre trans	eby certify that the s Postal Service wessed to the Mail mitted to the USP	is Fec(th sul Stop FO (57	Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the da	deposited with the U t class mail in an env above, or being fac- tte indicated below.	Inited elope simile
									(Depositor's	name)
									(Sign	nature)
										(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION N	0.
10/567,830	09/26/2006			Takeshi Nakamur	a		M1071.1960 2884			_
TITLE OF INVENTION		AKER	USING THE SAM							
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE D	UE.	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO		\$1510	\$300		\$0		\$1810	01/05/2009	
EXAM	INER		ART UNIT	CLASS-SUBCLASS						
PENDLETO	N, DIONNE		2627	381-337000	_					
Change of corresponde CFR 1.363).	nce address or indicatio	a of "F	ee Address" (37	2. For printing on t	he pa	atent front page, lis	t			
				(I) the names of u or agents OR, alter	p to	3 registered paten	t attori	eys I		_
	ondence address (or Cha 1/122) attached.			(2) the name of a single firm (having as a member a 2						
PTO/SB/47; Rev 03-0 Number is required.	cation (or "Fee Address 2 or more recent) attach	'Indica ed. Us	ation form e of a Customer	registered attorney 2 registered patent listed, no name wil	attor	gent) and the nam neys or agents. If printed.	es of u no nan	e is 3		
3. ASSIGNEE NAME A										
PLEASE NOTE: Unl recordation as set forth	ess an assignee is ident 1 in 37 CFR 3.II. Comp	ified be detion	elow, no assignee of this form is NO	data will appear on the Ta substitute for filing	he pa gan a	itent. If an assign issignment.	ee is io	entified below, the do	cument has been file	d for
(A) NAME OF ASSIC				(B) RESIDENCE: (C						
Please check the appropri	ate assignee category or	catego	ories (will not be pr	inted on the patent):	۵	Individual 🔲 Co	orporati	on or other private gro	up entity Govern	nment
4a. The following fee(s)	are submitted:		46			se first reapply ar	ıy prev	lously paid issue fee	hown above)	
☐ Issue Fee ☐ A check is enclosed.										
Publication Fee (No small entity discount permitted) Advance Order - # of Copies			ed)	☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any					,	
				overpayment, to I	Depós	sit Account Numbe	ř	(enclose a	extra copy of this fo	rm).
5. Change in Entity Stat	us (from status indicated SMALL ENTITY statu			☐ b. Apolicant is no	lone	ser claiming SMAI	L.EN	TITY status. See 37 CF	R 1.27(e)(2)	
NOTE: The Issue Fee and interest as shown by the r										aty in
Authorized Signature						Date				
Typed or printed name						Registration N	lo			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu- irginia 22313-1450. DC 13-1450.	FR 1.3 U.S.C. USPT den, sl NOT	11. The information 122 and 37 CFR O. Time will vary thould be sent to the SEND FEES OR O.	on is required to obtain 1.14. This collection i depending upon the i e Chief Information O COMPLETED FORM	or re s esti indivi ffice S TC	etain a benefit by t imated to take 12 i idual case. Any co r, U.S. Patent and O'THIS ADDRESS	he pub minuter mment Trader	ic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa O TO: Commissioner f	by the USPTO to prog gathering, preparing the you require to con- artment of Commerce or Patents, P.O. Box	cess) g, and aplete , P.O. 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/567,830	10/567,830 09/26/2006 Takeshi Nakamura		M1071.1960	2884	
32172	7590 10/03/2008		EXAM	INER	
DICKSTEIN SHAPIRO LLP			PENDLETON, DIONNE		
	OF THE AMERICAS (6	ART UNIT PAPER NUMB			
NEW YORK, NY	10036-2714	2627			

DATE MAILED: 10/03/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
0/567,830	NAKAMURA, TAKE	SHI			
xaminer	Art Unit				
DIONNE H. PENDI ETON	2627				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-86) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.133 and MPEP 1308.

- This communication is responsive to amendment filed 8/23/2008.
- The allowed claim(s) is/are 19,20,24,26,28,29,33,35 and 37-42, renumbered as 1-14.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date _____
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

/Wavne Young/

Supervisory Patent Examiner, Art Unit 2627

Application/Control Number: 10/567,830

Art Unit: 2627

REASONS FOR ALLOWANCE

1. Claims 19, 20, 24, 26, 28, 29, 33, 35 and 37-42 are allowed.

The following is an examiner's statement of reasons for allowance:

a. The prior art of record fails to teach or to fairly suggest a diffuser for placement in front of a sound wave emission side of a cone-shaped sound source, comprising:

a first flow plate and a second flow plate as described in independent claim 19, wherein the first flow plate includes a wall tapered inwardly in the direction of sound wave emission and being further positioned outside an area defined by the coneshaped sound source wherein the sound waves are allowed to pass on both sides of the walls of the first flow plate;

and a second flow plate positioned adjacent to the first flow plate along the direction of sound emission, having a wall tapered outwardly and further being located outside an area defined by the first flow plate.

b. The prior art of record further fails to teach or to fairly suggest a diffuser for placement in front of a sound wave emission side of a cone-shaped sound source, comprising:

a first flow plate and a second flow plate as described in independent claim 28, wherein the first flow plate includes a wall tapered inwardly in the direction of sound wave emission and further positioned outside an area defined by the cone-shaped

Application/Control Number: 10/567,830

Art Unit: 2627

sound source wherein the sound waves are allowed to pass on both sides of the walls of the first flow plate and having a first opening proximal to the sound source and a second opening distal from the sound source, the first opening being larger than the second opening:

and a second flow plate positioned adjacent to the first flow plate and having a first opening proximal to the sound source and a second opening distal from the sound source, the first opening being larger than the second opening; and the second flow plate being positioned outside an area defined by the cone-shaped sound source and wherein the sound waves are allowed to pass on both sides of the walls of the second flow plate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

China (US 2004/0020711) discloses an outwardly tapered flow plate for a speaker.

Augustine (US 6,064,744) discloses a diffuser for a loudspeaker.

Wiener (US 5,832,099) discloses a sound dispersion system for a loudspeaker.

Selmin (US 4,322,578) discloses a sound reflector for a loudspeaker.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/567,830

Art Unit: 2627

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE H. PENDLETON whose telephone number is (571)272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dionne H Pendleton/ Examiner, Art Unit 2627

/Wayne Young/ Supervisory Patent Examiner, Art Unit 2627